

We Claim as Our Invention

1. A portable information terminal which allows an inputting operation with one hand, comprising:

- 5 a polyhedral structure having a plurality of component faces including at least a first component face and a second component face, wherein the second component face is adjacent the first component face and may accept a plurality of different user inputs; and
- a display screen accommodated on the first component face..

10 2. A portable information terminal as claimed in claim 1, further comprising:

at least four input keys arranged in a zigzag pattern on the second component face.

15 3. A portable information terminal as claimed in claim 1, further comprising:

at least four input keys arranged in a zigzag pattern on the second component face, each of the at least four input keys having a rib-like projection formed along a peripheral edge of a top face thereof.

20 4. A portable information terminal as claimed in claim 1, further comprising:

at least four input keys arranged in a zigzag pattern on the second component face, each of the at least four input keys having a projection formed at a substantially middle portion of a top face thereof.

25 5. A portable information terminal as claimed in claim 1, further comprising:

at least four input keys arranged in a zigzag pattern on the second component face, each of the at least four input keys having a projection formed at a substantially

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middle portion of a top face thereof, wherein the projections of adjacent input keys are continuous to each other.

6. A portable information terminal as claimed in claim 1, wherein the
5 polyhedral structure includes a third component face as part of the plurality of
component faces with which a thumb of a hand can contact such that the polyhedral
structure can be supported by a portion of the hand proximate to a root of the thumb,
and wherein the portable information terminal further comprises at least four input
10 keys arranged in a zigzag pattern on the second component face which can be
operated with four fingers of the hand from a forefinger of the hand on down.

7. A portable information terminal as claimed in claim 1, wherein the
polyhedral structure includes a third component face as part of the plurality of
component faces disposed in an opposing position with respect to the second
15 component face, the third component face including at least one of a key and a button
disposed thereon for operation using a thumb of a hand, and wherein the portable
information terminal further comprises at least four input keys arranged in a zigzag
pattern on the second component face which can be operated with four fingers of the
hand from a forefinger of the hand on down.

8. A portable information terminal as claimed in claim 1, wherein the
polyhedral structure includes a third component face as part of the plurality of
component faces, the third component face disposed in an opposing position with
respect to the second component face, the third component face including at least one
25 of a shift key, a control key, a caps lock key and an operation section for inputting one
of a coordinate and a direction and which is operable using a thumb of a hand, and
wherein the portable information terminal further comprises at least four input keys
arranged in a zigzag pattern on the second component face which are operable with
four fingers of the hand from a forefinger of the hand on down and to which at least
30 one of alphanumeric characters and kana and kanji characters are allocated.

9. A portable information terminal as claimed in claim 1, wherein the polyhedral structure includes a third component face as part of the plurality of component faces disposed in an opposing position with respect to the second component face, the third component face including both a left hand operation section which can be operated using a thumb of a left hand and a right hand operation section which can be operated using a thumb of a right hand, and wherein the portable information terminal further comprises at least four input keys arranged in a zigzag pattern on the second component face which can be operated with four fingers of both the left hand and the right hand from a forefinger on down.

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10. A portable information terminal as claimed in claim 1, wherein the portable information terminal is operable in both a left hand operation mode and a right hand operation mode, and wherein the portable information terminal further comprises a changeover port for changing over an allocation of input keys disposed on the second component face in response to a current operation mode of the portable information terminal.

11. A portable information terminal as claimed in claim 1, further comprising:

at least four input keys arranged in a zigzag pattern in two rows on the second component face wherein a key top of each of the at least four input keys in each of the two rows is supported for pivotal motion around a fulcrum at an edge portion thereof remote from the other key row such that a portion of each key top proximate to the other key row can be yieldably moved when depressed.

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12. A portable information terminal as claimed in claim 1, further comprising:

at least four input keys arranged in a non-uniform key pitch in a zigzag pattern on the second component face.

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13. A portable information terminal as claimed in claim 1, wherein at least one of a connection port to an external apparatus and a slot for insertion of a medium is disposed on one of the plurality of component faces other than the first and second component faces of the polyhedral structure.

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14. A portable information terminal which allows an inputting operation with one hand, comprising:

a polyhedral structure having a plurality of component faces including at least a keyboard face and a thumb operation face, wherein the thumb operation face is
10 disposed in an opposing position with respect to the keyboard face and may be contacted with a thumb of a hand; and

at least four input keys arranged in a zigzag pattern on the keyboard face, the at least four input keys being operable with four fingers of the hand from a forefinger of the hand on down.

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15. A portable information terminal as claimed in claim 14, further comprising:

at least four rib-like projections, each of the at least four rib-like projections formed along a peripheral edge of a top face of a respective one of the at least four
20 input keys.

16. A portable information terminal as claimed in claim 14, further comprising:

at least four projections, each of the at least four projections formed at a substantially middle portion of a top face of a respective one of the at least four input
25 keys.

17. A portable information terminal as claimed in claim 14, further comprising:

at least four projections, each of the at least four projections formed at a substantially middle portion of a top face of a respective one of the at least four input keys such that the projections of adjacent input keys are continuous to each other.

5 18. A portable information terminal as claimed in claim 14, further comprising:

 a left hand operation section arranged on the thumb operation face which can be operated using a thumb of a left hand; and

 a right hand operation section arranged on the thumb operation face which
10 can be operated using a thumb of a right hand.

 19. A portable information terminal as claimed in claim 14, wherein the portable information terminal can operate in both a left hand operation mode and a right hand operation mode, and wherein the portable information terminal further
15 comprises a changeover section for changing over allocation of the at least four input keys in response to a current operation mode of the portable information terminal.

 20. A portable information terminal as claimed in claim 14, wherein the at least four input keys are further arranged in two rows on the keyboard face such that
20 a key top of each of the at least four input keys in each of the two rows is supported for pivotal motion around a fulcrum at an edge portion of the key top remote from the other key row such that a portion of the key top proximate to the other key row can be yieldably moved when depressed.

 21. A portable information terminal as claimed in claim 14, wherein the at least four input keys are arranged in a non-uniform key pitch.